

REMARKS

Claims 1-18 are pending in the application. As will be discussed in detail below, it is believed that the application is in condition for allowance.

Claims 1, 2, and 10-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tang et al. (US 5,684,365) ("Tang") in view of Ukai (US 4,810,060).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Claims 1, 2, and 10-12 include the following limitation: "a driving thin film transistor (TFT) having a first end in communication with said self-emissive element for supplying a drive current to said self-emissive element and a second end in communication with a power source with a constant voltage; and a switching TFT having a first end in communication with a data line and a second end in communication with a gate of said driving TFT, said switching TFT controls whether a data signal from said data line is supplied to said gate of said driving TFT." The references do not teach or suggest the claimed limitations.

The Examiner asserts that the switching TFT of Ukai can be substituted for the driving TFT in Tang and then operated as a driving TFT. Switching TFTs and driving TFTs have different functions and as such, cannot be substituted for one another. Switching TFTs are used for controlling the timing for supplying a current to an EL element, while driving TFTs are used for supplying current to the EL element. Additionally, switching TFTs and driving TFTs are substantially different in their design. A switching TFT, only has two operating modes, on and off; where current flows from the drain to the source when a voltage is applied to the gate and no current flows in the absence of a voltage at the gate. On the other hand, a driving TFT allows for modulation of the current flowing from the drain to the source based upon the voltage applied at the gate. The driving TFT is capable of controlling not only the presence of current flow from drain to source, but also the magnitude of the current flow from drain to source. The Examiner has not pointed to any reference that teaches Applicant's claimed driving TFT.

Ukai only teaches a switching TFT. There is no driving TFT in Ukai because there is no electroluminescence element in Ukai to drive. Instead, Ukai only has a switching TFT, which operates as follows:

Voltage is applied across a selected one of each of the gate and source buses 18 and 19, by which is conducted only one of the thin film transistor 16 that is supplied with the voltage, and charges are stored in the display electrode 15 connected to the drain of the conducted thin film transistor 16. Thus, voltage is applied across the liquid crystal 14 only between the charged display electrode 15 and the common electrode 17, by which only that portion of the liquid crystal 14 is made transparent or untransparent to light, thus providing a selective display. (See column 1, lines 43-55; Emphasis supplied.)

Thus, the switching TFT operates so as to provide a voltage to the liquid crystal. There is nothing in Ukai that teaches or suggests a driving TFT that supplies current.

Further, Ukai teaches that the drain current I_D is proportional to a ratio W/L and since the drain voltage V_D is proportional to the drain current, the ratios W/L can change the voltage applied to the liquid crystal. See column 3, lines 21-45. Namely, in Ukai, by changing the size of the switching TFT, the current amount is changed to thereby change the voltage to be applied to the liquid crystal. As explained above, the switching TFT operates to provide a voltage to the liquid crystal and depending on the size of the switching TFT, a different voltage will be applied.

In contrast to Ukai, Applicant claims a driving TFT that has a first end in electrical communication with the self-emissive element for supplying a drive current to the self-emissive element and a second end in electrical communication with a power source with a constant voltage. The size of the driving TFT in a display pixel for one color is altered from that in a display pixel for another color. Thus, as claimed, the source-drain voltage is basically fixed and does not change when the size of the driving TFT is altered. Instead, the size of the driving TFT changes the drive current supplied to the self-emissive element. Accordingly, the structures and operation of the structures are completely different and one skilled in the art would not substitute the switching TFT of Ukai for the driving TFT of Tang as suggested by the Examiner. For at least these reasons, there is no motivation to combine Tang and Ukai.

Accordingly, the Examiner has not established a *prima facie* case of obviousness. As such, independent Claim 1 is not obvious over Tang in view of Ukai and is therefore allowable. Moreover, for at least the reason that Claims 2, and 10-12 depend from and further limit independent Claim 1, they too are not obvious and are allowable.

Claims 3-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ukai in view of Tang and further in view of Rumbaugh (US 6,072,272).

Claims 3-9 include the following limitation: "a driving thin film transistor (TFT) having a first end in communication with said self-emissive element for supplying a drive current to said self-emissive element and a second end in communication with a power source with a constant voltage; and a switching TFT having a first end in communication with a data line and a second end in communication with a gate of said driving TFT, said switching TFT controls whether a data signal from said data line is supplied to said gate of said driving TFT." As explained above, Ukai and Tang do not teach or suggest that limitation and Rumbaugh does not remedy that deficiency. Thus, Applicant respectfully requests that the rejection be withdrawn.

Claims 13-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ukai in view of Tang, in view of Rumbaugh, and further in view of Codama (US 6,121,726).

Claims 13-18 include the following limitation: "a driving thin film transistor (TFT) having a first end in communication with said self-emissive element for supplying a drive current to said self-emissive element and a second end in communication with a power source with a constant voltage; and a switching TFT having a first end in communication with a data line and a second end in communication with a gate of said driving TFT, said switching TFT controls whether a data signal from said data line is supplied to said gate of said driving TFT." As explained above, Ukai and Tang do not teach or suggest that limitations and Rumbaugh and Codama do not remedy the deficiency. Thus, Applicant respectfully requests that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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